CLAIMS

1. A magnetic recording medium comprising a non-magnetic support, at least one primer layer formed on one surface of the non-magnetic support, a magnetic layer formed on the primer layer, and a backcoat layer formed on the other surface of the non-magnetic support, wherein the non-magnetic support has a thickness of 2.0 μm to 7.0 μm , the magnetic layer has a thickness of 0.30 μm or less and a centerline average surface roughness Ra of 3.2 nm or less, and (P₁-P₀) is 30 nm or less and (P₁-P₂₀) is 5 nm or less in which P₀ is an averaged height of projections of the magnetic layer, and P₁, P₂, ---- and P₂₀ are heights of the highest, the second highest, --- and the 20th highest projections of the magnetic layer, respectively, when they are measured in a field of view of 350 $\mu\text{m} \times 260~\mu\text{m}$ on the magnetic layer.

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- 15 2. The magnetic recording medium according to claim 1, wherein (P_1-P_0) is from 5 nm to 30 nm.
 - 3. The magnetic recording medium according to claim 1, which is recorded and read with a reading head comprising a magnetoresistance effect element.
- 4. The magnetic recording medium according to claim 1, wherein said magnetic layer has a coercive force of 120 to 320 kA/m, and a product of a residual magnetic flux density in the machine direction of said magnetic layer and a thickness of said magnetic layer is from 0.0018 $T\mu m$ to 0.06 $T\mu m$.
- 5. The magnetic recording medium according to claim 1, wherein said non-magnetic support has a Young's modulus in a machine direction of at least 6.08 GPa (at least 600 kg/mm²), and a ratio of a Young's modulus MD in the machine direction to a Young's modulus

TD in a transverse direction (MD/TD) is from 0.6 to 1.8.